CANADIAN GEOTECHNICAL JOURNAL/REVUE CANADIENNE DE GÉOTECHNIQUE VOLUME 10, 1973 AUTHOR INDEX/RÉPERTOIRE DES AUTEURS

Adams, J. I., and Klym, T. W. A study of anchorages for transmission tower foundations: Closure, 125-126.

Adams, J. I. See Radhakrishna, H. S.

Allen, J. H. See Dayal, U.

Alpan, I. See Frydman, S.

Alpan, I. See Kassiff, G.

Andrawes, K. Z. See El-Sohby, M. A.

Arulanandan, K. See Holzer, T. L.

Auld, R. G. See Rowley, R. K.

Badke, D. See Gupta, R. C.

Bhaskaran, R. Deformation characteristics of granular materials under hydrostatic compression: Discussion, 558-559.

Bhaskaran, R. See Sankaran, K. S.

Bjerke, H. See Broms, B. B.

Bozozuk, M. Settlement performance of two embankments on deep compressible soils: Discussion, 670.

Bozozuk, M. Settlement of an embankment constructed on marine clay: Discussion, 671. Broms, B. B., and Bjerke, H. Extrusion of soft clay through a retaining wall, 102-109.

Brzezinski, L. S., Shector, L., MacPhie, H. L., and Vander Noot, H. J. An experience with heave of cast in situ expanded base piles, 246-260.

Campanella, R. G. See Vaid, Y. P.

Capelle, J. F. Foundation instrumentation: Book Review, 677.

Chan, H. T., and Kenney, T. C. Laboratory investigation of permeability ratio of New Liskeard varved soil, 453-472.

Chan, H. T. See Kenney, T. C.

Christiansen, E. A. Cities and geology: Book Review, 678.

Clark, J. I., and Meyerhof, G. G. The behavior of piles driven in clay. II: Investigation of the bearing capacity using total and effective strength parameters, 86-102.

Cragg, C. B. H. See Robinsky, E. I.

Crawford, C. B. The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Closure, 122–125.

Cruden, D. M., and Krahn, J. A reexamination of the geology of the Frank Slide, 581-591.

Darch, B. T. See Devata, M.

Dascal, O. Manicouagan-3: Auscultation du barrage principal, 536-552.

Dascal, O., et Larocque, G. S. Charactéristiques de compressibilité des argiles du complexe Nottaway-Broadback-Rupert (Baie James), 41-63.
 Dascal, O., Larocque, G. S. et Tournier, J.-P. Digue d'essai pour l'étude des tassements d'une

fondation d'argile molle et sensible, 363–391.

Dayal, U., and Allen, J. H. Instrumented impact cone penetrometer, 397-409.

DeJong, J., and Morgenstern, N. R. Heave and settlement of two tall building foundations in Edmonton, Alberta, 261-281.

Devata, M., and Darch, B. T. Settlement of an embankment constructed on marine clay, 161-179.

Devenny, D. W. See Gibson, G. L.

Eden, W. J., McRostie, G. C., and Hall, J. S. Measured contact pressures below raft supporting a stiff building, 180–192.

Eisenstein, Z., and Morrison, N. A. Prediction of foundation deformations in Edmonton using an *in situ* pressure probe, 193–210.

Elsamny, M. K. Evaluation of the elasticity of clay soils, 632-642.

Can. Geotech. J., 10, 679 (1973)

El-Sohby, M. A., and Andrawes, K. Z. Deformation characteristics of granular materials under hydrostatic compression: Reply, 676.

Emery, J. J. Fundamentals of earthquake engineering: Book Review, 127.

Frydman, S., Zeitlen, J. G., and Alpan, I. The yielding behavior of particulate media, 341-362. Garneau, R. See Samson, L.

Gaskin, P. N. See Sutherland, H. B.

Gibson, G. L., and Devenny, D. W. Concrete to bedrock bond testing by jacking from bottom of a bore hole, 304-306.

Gupta, R. C., Marshall, R. G., and Badke, D. Instrumentation for dykes on permafrost, Kettle Generating Station, 410-427.

Hall, J. S. See Eden, W. J.

Hanna, T. H. The influence of anchor inclination on pull-out resistance of clays, 664-669.

Hanna, T. H., and Tan, R. H. S. The behavior of long piles under compressive loads in sand,

Höeg, K. See Holzer, T. L.

Hollingshead, A. B., Yaremko, E. K., and Nelll, C. R. Sedimentation in Glenmore Reservoir, Calgary, Alberta, 109-119.

Holzer, T. L., Höeg, K., and Arulanandan, K. Excess pore pressures during undrained clay creep, 12-24.

Judge, A. The prediction of permafrost thicknesses, 1-11.

Kassiff, G., and Alpan, I. A slope failure in swelling clay, 531-536.

Kenney, T. C. See Chan, H. T.

Kenney, T. C., and Chan, H. T. Field investigation of permeability ratio of New Liskeard varved soil, 473-488.

Klym, T. W. See Adams, J. I.

Krahn, J. See Cruden, D. M.

Kuhlemerer, R. L. See Urlich, C. M.

LaRochelle, P. See Tavenas, F. A. Larocque, G. S. See Dascal, O.

Lawrence, V. M. See Mitchell, R. J.

Legget, R. F. Exploring minerals and crystals: Book Review, 309-310.

Legget, R. F. See Peckover, F. L.

Legget, R. F., and Peckover, F. L. Foundation performance of a 100-year-old bridge, 504-519. Leonards, G. A. The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Discussion, 120-122.

Lo, K. Y. An approach to the problem of progressive failure: Closure, 671-672.

Lo, K. Y., and Morin, J. P. Strength anisotropy and time effects of two sensitive clays: Reply, 566-569.

Mackay, J. R. A frost tube for the determination of freezing in the active layer above permafrost, 392-396.

MacPhie, H. L. See Brzezinski, L. S.

Marshall, R. G. See Gupta, R. C.

McRoberts, E. C. See Nixon, J. F.

McRostie, G. C. See Eden, W. J.

Meyerhof, G. G. The uplift capacity of foundations under oblique loads, 64-70.

Meyerhof, G. G. Coulomb's memoir on statics: Book Review, 309.

Meyerhof, G. G. Measured contact pressures below raft supporting a stiff building: Discussion, 673.

Meyerhof, G. G. See Clark, J. I.

Meyerhof, G. G., and Ranjan, G. The bearing capacity of rigid piles under inclined loads in sand. II: Batter piles, 71-85.

Meyerhof, G. G., and Ranjan, G. The bearing capacity of rigid piles under inclined loads in sand. III: Pile groups, 428-438.

Mitchell, R. J. An apparatus for plane strain and true triaxial testing of undisturbed soil

samples, 520-527.

Mitchell, R. J., and Lawrence, V. M. An approach to the problem of progressive failure: Discussion, 562-564

Mitchell, R. J., and Wong, P. K. K. The generalized failure of an Ottawa Valley Champlain Sea Clay, 607-616.

Morgenstern, N. R. See DeJong, J. Morgenstern, N. R. See Nixon, J. F.

Morgenstern, N. R., and Smith, L. B. Thaw-consolidation tests on remoulded clays, 25-40.

Morin, J. P. See Lo, K. Y.

Morrison, N. A. See Eisenstein, Z.

Neill, C. R. See Hollingshead, A. B.

Newland, P. L. Excess pore pressures during undrained clay creep: Discussion, 673-675.

Nixon, F. Thaw-consolidation of some layered systems, 617-631.

Nixon, J. F., and McRoberts, E. C. A study of some factors affecting the thawing of frozen soils, 439-452.

Nixon, J. F., and Morgenstern, N. R. The residual stress in thawing soils, 571-580.

Ogunbadejo, T. A. See Quigley, R. M.

Peckover, F. L. See Legget, R. F.

Peckover, F. L., and Legget, R. F. Canadian soil penetration tests of 1872, 528-531.

Quigley, R. M., and Ogunbadejo, T. A. Clay layer fabric and oedometer consolidation of a soft varved clay: Closure, 308.

Radhakrishna, H. S., and Adams, J. I. Long-term uplift capacity of augered footings in fissured clay, 647–652.

Raju, V. S., and Sadasivan, S. K. Deformation characteristics of granular materials under hydrostatic compression: Discussion, 559-562.

Ranjan, G. See Meyerhof, G. G.

Rao, D. V. Clay layer fabric and oedometer consolidation of soft varved clay: Discussion, 307-308.

Rao, S. N. See Sridharan, A.

Robinsky, E. I., and Cragg, C. B. H. Volume displacement effects on pile capacity in loose sand, 645-647.

Rowley, R. K. See Watson, G. H.

Rowley, R. K., Watson, G. H., Wilson, T. M., and Auld, R. G. Performance of a 48-in. warm-oil pipeline supported on permafrost, 282-303.

Roy, M. See Tavenas, F. A. Sadasivan, S. K. See Raju, V. S.

Samson, L., and Garneau, R. Settlement performance of two embankments on deep compressible soils, 211–226.

Sankaran, K. S., and Bhaskaran, R. Strength anisotropy and time effects of two sensitive clays: Discussion, 564-566.

Scott, J. S. Engineering geology case histories number 8; Engineering seismology: The works of man: Book Review, 570.

Shector, L. See Brzezinski, L. S.

Skermer, N. A. Finite element analysis of El Infiernillo Dam, 129-144.

Slusarchuk, W. A. See Watson, G. H.

Slusarchuk, W. A., Watson, G. H., and Speer, T. L. Instrumentation around a warm oil pipeline buried in permafrost, 227-245.

Smith, L. B. See Morgenstern, N. R. Speer, T. L. See Slusarchuk, W. A.

Sridharan, A., and Rao, S. N. True shear parameters of saturated clays, 652-663.

Sutherland, H. B., and Gaskin, P. N. A comparison of the T.R.R.L. and C.R.R.E.L. tests for the frost susceptibility of soils, 553-557.

Tan, R. H. S. See Hanna, T. H.

Tavenas, F. A., Roy, M., and LaRochelle, P. An artificial material for simulating Champlain clays, 489-503.

Tournier, J.-P. See Dascal, O.

Urlich, C. M., and Kuhlemeyer, R. L. Coupled rocking and lateral vibrations of embedded footings, 145-160.

Vaid, Y. P., and Campanella, R. G. Making rubber membranes, 643-644.

Vander Noot, H. J. See Brzezinski, L. S. Watson, G. H. See Slusarchuk, W. A.

Watson, G. H. See Rowley, R. K.

Watson, G. H., Slusarchuk, W. A., and Rowley, R. K. Determination of some frozen and thawed properties of permafrost soils, 592-606.
Wilson, N. E. Symposium on strength and deformation behaviour of soils: Book Review,

127-128.

Wilson, T. M. See Rowley, R. K.

Wong, P. K. K. See Mitchell, R. J.

Yaremko, E. K. See Hollingshead, A. B.

Zeitlen, J. G. See Frydman, S.

SUBJECT INDEX/RÉPERTOIRE DES SUJETS1

A. General

02. Historical Aspects

Coulomb's memoir on statics: Book Review. Meyerhof, G. G., 309.

04. Textbooks, Handbooks, and Geotechnical Periodicals

Fundamentals of earthquake engineering: Book Review. Emery, J. J., 127.

Exploring minerals and crystals: Book Review. Legget, R. F., 309.

Engineering geology case histories number 8; Engineering seismology: The works of man: Book Review. Scott, J. S., 570.

Foundation instrumentation: Book Review. Capelle, J. F., 677.

Cities and geology: Book Review. Christiansen, E. A., 678.

07. Societies and Meetings

Symposium on strength and deformation behaviour of soils: Book Review. Wilson, N. E., 127.

B. Engineering Geology

01. Soil Formation

Sedimentation in Glenmore Reservoir, Calgary, Alberta. Hollingshead, A. B., Yaremko, E. K., and Neill, C. R., 109.

03. Mass Movement and Subsidence

A reexamination of the geology of the Frank Slide. Cruden, D. M., and Krahn, J., 581.

05. Permafrost and Frozen Ground

The prediction of permafrost thicknesses. Judge, A., 1.

10. Mineralogy and Petrography

Exploring minerals and crystals: Book Review. Legget, R. F., 309.

C. Site Investigations

03. Probings (Soundings)

Canadian soil penetration tests of 1872. Peckover, F. L., and Legget, R. F., 528.

07. Measurement and Field Conditions

Field investigation of permeability ratio of New Liskeard varved soil. Kenney, T. C., and Chan, H. T. 473

Manicouagan-3: Auscultation du barrage principal. Dascal, O., 536.

08. Field Testing

A study of anchorages for transmission tower foundations: Closure. Adams, J. I., and Klym, T. W., 125.

D. Soil Properties: Laboratory and Field Determinations

00 General

Making rubber membranes. Vaid, Y. P., and Campanella, R. G., 643.

03. Composition, Structure, and Density

Clay layer fabric and oedometer consolidation of a soft varved clay: Discussion. Rao, D. V., 307.

¹Based on the International Geotechnical Classification System (IGC) approved in 1969 by the International Society for Soil Mechanics and Foundation Engineering. Permission to use this classification system is gratefully acknowledged.

Clay layer fabric and oedometer consolidation of a soft varved clay: Closure. Quigley, R. M., and Ogunbadejo, T. A., 308.

04. Permeability and Capillarity

Laboratory investigation of permeability ratio of New Liskeard varved soil. Chan, H. T., and Kenney, T. C., 453.

Field investigation of permeability ratio of New Liskeard varved soil. Kenney, T. C., and Chan, H. T., 473.

05. Compressibility

Thaw-consolidation tests on remoulded clays. Morgenstern, N. R., and Smith, L. B., 25. Charactéristiques de compressibilité des argiles du complexe Nottaway-Broadback-Rupert (Baie James). Dascal, O. et Larocque, G. S., 41. Prediction of foundation deformations in Edmonton using an in situ pressure probe.

Eisenstein, Z., and Morrison, N. A., 193.

Clay layer fabric and oedometer consolidation of a soft varved clay: Discussion. Rao, D. V., 307.

Clay layer fabric and oedometer consolidation of a soft varved clay: Closure. Quigley,

R. M., and Ogunbadejo, T. A., 308.

Determination of some frozen and thawed properties of permafrost soils. Watson, G. H., Slusarchuk, W. A., and Rowley, R. K., 592.

Thaw-consolidation of some layered systems. Nixon, J. F., 617.

06. Shear-deformation and Strength Properties

Excess pore pressures during undrained clay creep. Holzer, T. L., Höeg, K., and Arulanandan, K., 12.

The yielding behavior of particulate media. Frydman, S., Zeitlen, J. G., and Alpan, I., 341. Instrumented impact cone penetrometer. Dayal, U., and Allen, J. H., 397.

An apparatus for plane strain and true triaxial testing of undisturbed soil samples. Mitchell, R. J., 520.

Canadian soil penetration tests of 1872. Peckover, F. L., and Legget, R. F., 528.

Deformation characteristics of granular materials under hydrostatic compression: Discussion. Bhaskaran, R., 558.

Deformation characteristics of granular materials under hydrostatic compression: Discussion. Raju, V. S., and Sadasivan, S. K., 559.

An approach to the problem of progressive failure: Discussion. Mitchell, R. J., and Lawrence, V. M., 562.

Strength anisotropy and time effects of two sensitive clays: Discussion. Sankaran, K. S., and Bhaskaran, R., 564.

Strength anisotropy and time effects of two sensitive clays: Reply. Lo, K. Y., and Morin, J. P., 566.

The residual stress in thawing soils. Nixon, J. F., and Morgenstern, N. R., 571.

Determination of some frozen and thawed properties of permafrost soils. Watson, G. H., Slusarchuk, W. A., and Rowley, R. K., 592.

The generalized failure of an Ottawa Valley Champlain Sea Clay. Mitchell, R. J., and Wong, P. K. K., 607.

Evaluation of the elasticity of clay soils. Elsamny, M. K., 632.

True shear parameters of saturated clays. Sridharan, A., and Rao, S. N., 652. An approach to the problem of progressive failure: Closure. Lo, K. Y., 671.

Excess pore pressures during undrained clay creep: Discussion. Newland, P. L., 673.

Deformation characteristics of granular materials under hydrostatic compression: Reply. El-Sohby, M. A., and Andrawes, K. Z., 676.

08. Thermal Properties

Thaw-consolidation tests on remoulded clays. Morgenstern, N. R., and Smith, L. B., 25.

Instrumentation around a warm oil pipeline buried in permafrost. Slusarchuk, W. A.,
Watson, G. H., and Speer, T. L., 227.

Performance of a 48-in. warm-oil pipeline supported on permafrost. Rowley, R. K., Watson, G. H., Wilson, T. M., and Auld, R. G., 282.

A frost tube for the determination of freezing in the active layer above permafrost. Mackay, J. R., 392.

Instrumentation for dykes on permafrost, Kettle Generating Station. Gupta, R. C., Marshall, R. G., and Badke, D., 410.

A comparison of the T.R.R.L. and C.R.R.E.L. tests for the frost susceptibility of soils. Sutherland, H. B., and Gaskin, P. N., 553.

The residual stress in thawing soils. Nixon, J. F., and Morgenstern, N. R., 571.

Determination of some frozen and thawed properties of permafrost soils. Watson, G. H., Slusarchuk, W. A., and Rowley, R. K., 592.

Thaw-consolidation of some layered systems. Nixon, J. F., 617.

10. Properties of Soil-Additive Mixtures

An artificial material for simulating Champlain clays. Tavenas, F. A., Roy, M., and LaRochelle, P., 489.

E. Analysis of Soil-engineering Problems

01. In Situ Stresses Caused by Gravity and Applied Loads and Excavations

Finite element analysis of El Infiernillo Dam. Skermer, N. A., 129.

Measured contact pressures below raft supporting a stiff building. Eden, W. J., McRostie, G. C., and Hall, J. S., 180.

Measured contact pressures below raft supporting a stiff building: Discussion. Meyerhof, G. G., 673.

02. Deformation and Settlement Problems

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Discussion. Leonards, G. A., 120.

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Closure. Crawford, C. B., 122.

Settlement of an embankment constructed on marine clay. Devata, M., and Darch, B. T., 161.

Prediction of foundation deformations in Edmonton using an in situ pressure probe. Eisenstein, Z., and Morrison, N. A., 193.

Settlement performance of two embankments on deep compressible soils. Samson, L., and Garneau, R., 211.

Heave and settlement of two tall building foundations in Edmonton, Alberta. Morgenstern, N. R., and DeJong, J., 261.

Digue d'essai pour l'étude des tassements d'une fondation d'argile molle et sensible. Dascal, O., Larocque, G. S. et Tournier, J.-P., 363.

Settlement performance of two embankments on deep compressible soils: Discussion.

Settlement of an embankment constructed on marine clay: Discussion. Bozozuk, M., 671.

04. Bearing Capacity of Piles

The uplift capacity of foundations under oblique loads. Meyerhof, G. G., 64.

The bearing capacity of rigid piles under inclined loads in sand. II: Batter piles. Meyerhof, G. G., and Ranjan, G., 71.

The behavior of piles driven in clay. II: Investigation of the bearing capacity using total and effective strength parameters. Clark, J. I., and Meyerhof, G. G., 86.

The behavior of long piles under compressive loads in sand. Hanna, T. H., and Tan, R. H. S., 311.

The bearing capacity of rigid piles under inclined loads in sand. III: Pile groups. Meyerhof, G. G., and Ranjan, G., 428.

Volume displacement effects on pile capacity in loose sand. Robinsky, E. I., and Cragg, B. H., 645.

Long-term uplift capacity of augered footings in fissured clay. Radhakrishna, H. S., and Adams, J. I., 647.

The influence of anchor inclination on pull-out resistance of clays. Hanna, T. H., 664.

06. Stability of Slopes, Cuts, and Excavations

A slope failure in swelling clay. Kassiff, G., and Alpan, I., 531.

An approach to the problem of progressive failure: Discussion. Mitchell, R. J., and Lawrence, V. M., 562.

A reexamination of the geology of the Frank Slide. Cruden, D. M., and Krahn, J., 581. An approach to the problem of progressive failure: Closure. Lo, K. Y., 671.

08. Dynamic Problems

Coupled rocking and lateral vibrations of embedded footings. Urlich, C. M., and Kuhlemeyer, R. L., 145.

09. Frost Action and Heat-transfer Problems

Instrumentation around a warm oil pipeline buried in permafrost. Slusarchuk, W. A., Watson, G. H., and Speer, T. L., 227.

Performance of a 48-in. warm-oil pipeline supported on permafrost. Rowley, R. K., Watson, G. H., Wilson, T. M., and Auld, R. G., 282.

Instrumentation for dykes on permafrost, Kettle Generating Station. Gupta, R. C., Marshall, R. G., and Badke, D., 410.

A study of some factors affecting the thawing of frozen soils. Nixon, J. F., and McRoberts, E. C., 439.

F. Rock Properties; Laboratory and Field Determinations

08. Special Properties of Rock

Concrete to bedrock bond testing by jacking from bottom of a bore hole. Gibson, G. L., and Devenny, D. W., 304.

H. Design, Construction, and Behavior of Engineering Works

01. Foundations of Structures

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Discussion. Leonards, G. A., 120.

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Closure. Crawford, C. B., 122.

Measured contact pressures below raft supporting a stiff building. Eden, W. J., McRostie, G. C., and Hall, J. S., 180.

Prediction of foundation deformations in Edmonton using an in situ pressure probe. Eisenstein, Z., and Morrison, N. A., 193.

An experience with heave of cast in situ expanded base piles. Brzezinski, L. S., Shector, L., MacPhie, H. L., and Vander Noot, H. J., 246.

Heave and settlement of two tall building foundations in Edmonton, Alberta. DeJong, J., and Morgenstern, N. R., 261.

Foundation performance of a 100-year-old bridge. Legget, R. F., and Peckover, F. L., 504.

Measured contact pressures below raft supporting a stiff building: Discussion. Meyerhof, G. G., 673.

02. Retaining Structures and Cutoff Walls

Extrusion of soft clay through a retaining wall. Broms, B. B., and Bjerke, H., 103.

04. Earthworks, Embankments, Fills, and Dams

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Discussion. Leonards, G. A., 120.

The Empress Hotel, Victoria, British Columbia. Sixty-five years of foundation settlements: Closure. Crawford, C. B., 122.

Finite element analysis of El Infiernillo Dam. Skermer, N. A., 129.

Settlement of an embankment constructed on marine clay. Devata, M., and Darch, B. T., 161.

Settlement performance of two embankments on deep compressible soils. Samson, L., and Garneau, R., 211.

Digue d'essai pour l'étude des tassements d'une fondation d'argile molle et sensible. Dascal, O., Larocque, G. S. et Tournier, J.-P., 363.

A slope failure in swelling clay. Kassiff, G., and Alpan, I., 531.

Manicouagan-3: Auscultation du barrage principal. Dascal, O., 536.

Settlement performance of two embankments on deep compressible soils: Discussion.

Bozozuk, M., 670.

Settlement of an embankment constructed on marine clay: Discussion. Bozozuk, M., 671.

T. Related Disciplines

01. Pure Science

Finite element analysis of El Infiernillo Dam. Skermer, N. A., 129.
Coupled rocking and lateral vibrations of embedded footings. Urlich, C. M., and Kuhlemeyer, R. L., 145.

Canadian Geotechnical Journal Revue canadienne de géotechnique

Volume 10 • 1973

Editor / Directeur scientifique
A. G. STERMAC

Published by the National Research Council of Canada Publiée par le Conseil national de recherches du Canada



CONTENTS/SOMMAIRE

FEBRUARY/FÉVRIER

ARTICLES:	
A. Judge The prediction of permafrost thicknesses	1
T. L. Holzer, K. Höeg, and K. Arulanandan Excess pore pressures during undrained clay	•
creep	12
N. R. Morgenstern and L. B. Smith Thaw-consolidation tests on remoulded clays O. Dascal et G. S. Larocque Charactéristiques de compressibilité des argiles du com-	25
plexe Nottaway-Broadback-Rupert (Baie James)	41
G. G. Meyerhof The uplift capacity of foundations under oblique loads	64
G. G. Meyerhof and G. Ranjan The bearing capacity of rigid piles under inclined loads	71
in sand. II. Batter piles J. I. Clark and G. G. Meyerhof The behavior of piles driven in clay. II. Investigation of	/1
the bearing capacity using total and effective strength parameters	86
TECHNICAL NOTES/NOTES TECHNIQUES:	
B. B. Broms and H. Bjerke Extrusion of soft clay through a retaining wall	103
A. B. Hollingshead, E. K. Yaremko, and C. R. Neill Sedimentation in Glenmore Reser-	
voir, Calgary, Alberta	109
DISCUSSIONS:	
G. A. Leonards The Empress Hotel, Victoria, British Columbia. Sixty-five years of	
foundation settlements: Discussion	120
C. B. Crawford The Empress Hotel, Victoria, British Columbia. Sixty-five years of	
foundation settlements: Closure	122
J. I. Adams and T. W. Klym A study of anchorages for transmission tower foundations:	
Closure	125
BOOK REVIEWS/CRITIQUE DES LIVRES:	
J. J. Emery Fundamentals of earthquake engineering	127
N. E. Wilson Symposium on strength and deformation behaviour of soils	127
MAY/MAI	
N. A. Skermer Finite element analysis of El Infiernillo Dam	129
C. M. Urlich and R. L. Kuhlemeyer Coupled rocking and lateral vibrations of embedded	127
footings	145
M. Devata and B. T. Darch Settlement of an embankment constructed on marine clay	161
W. J. Eden, G. C. McRostie, and J. S. Hall Measured contact pressures below raft sup-	400
porting a stiff building	180
Z. Eisenstein and N. A. Morrison Prediction of foundation deformations in Edmonton	193
using an in situ pressure probe L. Samson and R. Garneau Settlement performance of two embankments on deep com-	193
pressible soils	211
W. A. Slusarchuk, G. H. Watson, and T. L. Speer Instrumentation around a warm oil	
pipeline buried in permafrost	227
L. S. Brzezinski, L. Shector, H. L. MacPhie, and H. J. Vander Noot An experience with	
heave of cast in situ expanded base piles	246
J. DeJong and N. R. Morgenstern Heave and settlement of two tall building foundations in Edmonton, Alberta	261
R. K. Rowley, G. H. Watson, T. M. Wilson, and R. G. Auld Performance of a 48-in.	282
warm-oil pipeline supported on permafrost	204
TECHNICAL NOTE/NOTE TECHNIQUE:	
G. L. Gibson and D. W. Devenny Concrete to bedrock bond testing by jacking from bottom of a bore hole	304

DISCUSSIONS:	
 D. V. Rao Clay layer fabric and oedometer consolidation of soft varved clay: Discussion R. M. Quigley and T. A. Ogunbadejo Clay layer fabric and oedometer consolidation of a soft varved clay: Closure 	307 308
	300
BOOK REVIEWS/CRITIQUE DES LIVRES:	
G. G. Meyerhof Coulomb's memoir on statics	309
R. F. Leggett Exploring minerals and crystals	309
AUGUST/AOÛT	
ARTICLES:	
T. H. Hanna and R. H. S. Tan The behavior of long piles under compressive loads in sand	311
 S. Frydman, J. G. Zeitlen, and I. Alpan The yielding behavior of particulate media O. Dascal, G. S. Larocque et JP. Tournier Digue d'essai pour l'étude des tassements d'une fondation d'argile molle et sensible 	341
J. R. Mackay A frost tube for the determination of freezing in the active layer above permafrost	392
U. Dayal and J. H. Allen Instrumented impact cone penetrometer	397
R. C. Gupta, R. G. Marshall, and D. Badke Instrumentation for dykes on permafrost, Kettle Generating Station	410
G. G. Meyerhof and G. Ranjan The bearing capacity of rigid piles under inclined loads in sand. III: Pile groups	428
J. F. Nixon and E. C. McRoberts A study of some factors affecting the thawing of frozen soils	439
H. T. Chan and T. C. Kenney Laboratory investigation of permeability ratio of New Liskeard varved soil	453
T. C. Kenney and H. T. Chan Field investigation of permeability ratio of New Liskeard varved soil	473
F. A. Tavenas, M. Roy, and P. LaRochelle An artificial material for simulating Champlain clays	489
R. F. Leggett and F. L. Peckover Foundation performance of a 100-year-old bridge	504
TECHNICAL NOTES/NOTES TECHNIQUES: R. J. Mitchell An apparatus for plane strain and true triaxial testing of undisturbed	520
soil samples	520 528
F. L. Peckover and R. F. Legget Canadian soil penetration tests of 1872 G. Kassiff and I. Alpan A slope failure in swelling clay	531
O. Dascal Manicouagan-3: Auscultation du barrage principal	536
H. B. Sutherland and P. N. Gaskin A comparison of the T.R.R.L. and C.R.R.E.L. tests for the frost susceptibility of soils	553
DISCUSSIONS:	
R. Bhaskaran Deformation characteristics of granular materials under hydrostatic compression: Discussion	558
V. S. Raju and S. K. Sadasivan Deformation characteristics of granular materials under hydrostatic compression: Discussion	559
R. J. Mitchell and V. M. Lawrence An approach to the problem of progressive failure: Discussion	562
K. S. Sankaran and R. Bhaskaran Strength anisotropy and time effects of two sensitive clays: Discussion	564
K. Y. Lo and J. P. Morin Strength anisotropy and time effects of two sensitive clays: Reply	566
BOOK REVIEW/CRITIQUE DE LIVRE:	
J. S. Scott Engineering geology case histories number 8; Engineering seismology: The works of man	570
NOVEMBER/NOVEMBRE	
ARTICLES:	
J. F. Nixon and N. R. Morgenstern The residual stress in thawing soils	571
D. M. Cruden and J. Krahn A reexamination of the geology of the Frank Slide G. H. Watson, W. A. Slusarchuk, and R. K. Rowley Determination of some frozen and	581
thawed properties of permafrost soils	592

R. J. Mitchell and P. K. K. Wong The generalized failure of an Ottawa Valley Cham-	
plain Sea Clay	607
J. F. Nixon Thaw-consolidation of some layered systems	617
M. K. Elsamny Evaluation of the elasticity of clay soils	632
TECHNICAL NOTES/NOTES TECHNIQUES:	
Y. P. Vaid and R. G. Campanella Making rubber membranes	643
E. I. Robinsky and C. B. H. Cragg Volume displacement effects on pile capacity in	
loose sand	645
H. S. Radhakrishna and J. I. Adams Long-term uplift capacity of augered footings in	
fissured clay	647
A. Sridharan and S. N. Rao True shear parameters of saturated clays	652
T. H. Hanna The influence of anchor inclination of pull-out resistance of clays	664
DISCUSSIONS:	
M. Bozozuk Settlement performance of two embankments on deep compressible soils: Discussion	670
	670
M. Bozozuk Settlement of an embankment constructed on marine clay: Discussion	671
K. Y. Lo An approach to the problem of progressive failure: Closure	671
G. G. Meyerhof Measured contact pressures below raft supporting a stiff building: Discussion	(53
	673
P. L. Newland Excess pore pressures during undrained clay creep: Discussion	673
M. A. El-Sohby and K. Z. Andrawes Deformation characteristics of granular mate-	
rials under hydrostatic compression: Reply	676
BOOK REVIEWS/CRITIQUE DES LIVRES:	
J. F. Capelle Foundation instrumentation	677
E. A. Christiansen Cities and geology	678
Author Index	679
Subject Index	682
Contents of Volume 10	444